



Naval Air Station South Weymouth, MA Restoration Advisory Board (RAB) Meeting Minutes June 14, 2018

OCT - 1 2018

1. INTRODUCTION

Mr. John Goodrich, RAB facilitator from the Massachusetts Office of Public Collaboration, opened the meeting at approximately 7:00 PM. He requested that all attendees sign-in. RAB members provided introductions and affiliations for the record. RAB minutes from the February 8, 2018 meeting were accepted without comment.

The June 2018 RAB meeting presentation provided a status summary for active environmental restoration sites and for activities related to addressing per- and polyfluoroalkyl substances (PFAS) at the former Naval Air Station (NAS) South Weymouth. The Hangar 1, Former Firefighting Training Area, West Gate Landfill, and Rubble Disposal Area sites were not included with this presentation as no new activity has occurred with these sites. The summary provided a review of the work completed since February 2018. The presentation was led by Michelle Snyder of Resolution Consultants (Resolution).

2. PRESENTATION

Industrial Operations Area (IOA)

Excavation work began in October 2016, and Navy re-mobilized in December 2017 to continue the Remedial Action. Excavation work is temporarily on hold and is anticipated to resume in Summer 2018. Remaining areas to be excavated include Building 2 (demolished in Summer 2017) and the former Hazardous Waste Storage Area (HWSA).

The primary contaminants are polychlorinated biphenyls (PCBs) and polycyclic aromatic hydrocarbons (PAHs) in soil at the former Building 2 and PCBs in soil at the former HWSA. Pre-characterization soil sampling has been completed at the former Building 2 and is ongoing at the former HWSA. The purpose of the pre-characterization sampling is to refine the proposed extent of excavation work in these areas. In general, pre-characterization sampling was conducted on a 10-foot grid pattern around locations with PCB or PAH concentrations above their respective Remedial Goal (RG). RG exceedances were also delineated vertically in two-foot intervals. Contamination is primarily in the 2-4 foot below grade interval; however, a few locations have PCB RG exceedances as deep as 8 feet below grade. The pre-characterization 10-foot sampling density is greater than what is proposed for post-excavation confirmatory sampling. Therefore, discussions are underway with the U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) to allow pre-characterization data to be used in lieu of post-excavation samples in some areas. Pre-characterization data is limited in some areas; therefore, post-excavation confirmatory sampling will be conducted at those locations to confirm that concentrations above the RG have been excavated.

Several of the excavation areas are larger than anticipated. The original estimated volume of contaminated soil present at the IOA outlined in the Record of Decision (ROD) was 1,862 cubic yards. To date, approximately 2,955 cubic yards of contaminated soil has been excavated, with another 2,245 cubic yards anticipated to be removed. As stated in the ROD, the goal of the Remedial Action is to lower contaminant concentrations in soil, to allow for unrestricted use.

PFAS Site Inspection

Navy recently completed implementation of the field program in support of the PFAS Site Inspection (SI). The purpose of the PFAS SI is to determine the absence/presence of PFAS at the 13 areas identified in the Preliminary Assessment. The PFAS SI also includes evaluating eight existing ROD sites and the Main Gate, to further delineate the extent of PFAS impacts previously identified at these areas. The PFAS SI field activities included installation of soil borings and monitoring wells and collecting soil, groundwater, and surface water samples.

Analytical results are pending and the draft PFAS SI report is scheduled to be issued in Fall 2018.

Basewide PFOS and PFOA Land Use Control Implementation Plan (LUCIP)

In February 2018, Navy finalized a LUCIP to address perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) present in groundwater throughout NAS South Weymouth at concentrations above the U.S. EPA Lifetime Health Advisory (LHA) guidance level of 0.07 micrograms per liter. The LUCIP includes restrictions on groundwater extraction and use, and include:

- Restriction on installation or use of wells for the purpose of extracting groundwater from within the groundwater PFOS and PFOA Land Use Control (LUC) Area. Exemptions will be provided for environmental investigations and approved construction activities.
- Restrictions on construction/development/storm water management activities that may impact groundwater within the groundwater PFOS and PFOA LUC Area. Exceptions will be made for activities conducted in accordance with a dewatering plan approved by the Navy, U.S. EPA, and MassDEP.
- Restriction on activities that might disrupt or interfere with infrastructure components of Navy's environmental investigation (i.e. monitoring wells).

A draft Amendment to the Basewide PFOS and PFOA LUCIP was submitted in March 2018 to add the West Gate Landfill to the PFOS and PFOA LUC Area. Incorporating the West Gate Landfill into the Basewide PFOS and PFOA will allow for property transfer of the West Gate Landfill.

Former Sewage Treatment Plant (STP)

In April 2017, the Southfield Redevelopment Authority (SRA) Board of Directors voted in favor to remove the Aquifer Protection District designation to the underlying Sewage Treatment Plant Aquifer. In November 2017, the MassDEP removed the Potential Drinking Water Source Area designation from the Sewage Treatment Plant Aquifer. Due to the completion of these two administrative actions, groundwater at the former STP is no longer considered a suitable source of public drinking water and drinking water would not be an anticipated potential future use. As such, the drinking water screening criteria are no longer applicable, and dieldrin and all other reported concentrations of site contaminants of concern (COCs) in groundwater are below applicable screening criteria. The final groundwater sampling event was completed in April 2018 and all reported concentrations for site COCs were below screening criteria. Sediment sampling was completed in June 2017 and all reported concentrations were below RGs. The Long-term Monitoring (LTM) Report, summarizing the April 2018 groundwater sampling event and June 2017 sediment sampling event is scheduled to be issued in Fall 2018.

A Draft Proposed Remedial Action Plan (PRAP) and Draft ROD Amendment have been submitted for regulatory review. The ROD Amendment will add LUCs and LTM (completed, as noted above) to the remedy. The LUCs are required because not all contaminated subsurface soil was removed to reach a goal

of unrestricted land use. A draft LUCIP has also been issued, and will be finalized after the PRAP and Draft ROD Amendment are finalized. A draft Remedial Action Completion Report (RACR) has also been issued. Once the preceding documents are finalized, A Notice of Activity and Use Limitation (NAUL) for soil and a Finding of Suitability for Transfer (FOST) will be prepared so that the property can be transferred.

PFOS and PFOA were also detected in groundwater above screening criteria at three monitoring wells at the former STP. Navy will evaluate the need for additional action to address PFAS at the former STP following completion of the Basewide PFAS Site Inspection. The STP is included in the Basewide PFOS and PFOA LUCIP.

Building 81

Overburden enhanced bioremediation injections, using emulsified vegetable oil (EVO), were completed in December 2016. Results from the six-month post-injection monitoring event completed in June 2017 indicate that tetrachloroethene (PCE) concentrations in groundwater had decreased to below the more stringent Village Center District (VCD) RG of 110 parts-per-billion (ppb). However, during the 12-month post-injection monitoring event completed in December 2017, the PCE concentration increased at one well location to slightly above the VCD. The 18-month post-injection monitoring event was performed during the first week June 2018, and results are pending.

Bedrock enhanced bioremediation injections were completed in Fall 2017, with a total of 9,000 gallons of amendment and chase water injected across 17 bedrock wells. The 3-month and 6-month post-injection monitoring events were performed in January 2018 and April 2018, respectively. The 12-month post-injection monitoring event is scheduled to occur in October 2018.

The Building 81 bedrock PCE plume can be divided into two distinct areas: the west bedrock plume and the south bedrock plume. Results from the April 2018 post-injection monitoring event indicated that only 1 of 16 wells sampled in the west bedrock plume had a reported PCE concentration above VCD RG (well BR-11D). In general, concentrations of total organic carbon (TOC) and PCE de-chlorination by-products increased at several bedrock wells in the west bedrock plume, indicating good distribution of injected amendments and that treatment is progressing.

Data from the April 2018 sampling event indicated that only 2 of 10 wells sampled in the south bedrock plume had reported PCE concentrations above both the VCD and Recreational District (RecD) RGs (wells BR-7 and MW-03D). Both BR-7 and MW-03D have a long history of elevated PCE concentrations. In general, concentrations of TOC and PCE de-chlorination by-products increased at several bedrock wells in the south bedrock plume, indicating good distribution of injected amendments and that treatment is progressing. However, evidence of TOC or de-chlorination by-products were not as evident at MW-03D as other locations. It is unclear why injected amendments have not reached the MW-03D location and a contributing factor may be slow migration time. Post-injection bedrock groundwater monitoring will continue for at least two years, to continue to evaluate overall PCE remediation across both bedrock plumes at Building 81.

RAB Member: Will treatment get to well MW-03D? It appears that the injected amendments are just getting to MW-03D so it is too early to evaluate effectiveness in treatment. Data from upcoming post-injection monitoring events will help determine if treatment is occurring at MW-03D. If it does not appear that treatment is occurring, then other options may be considered to address impacts at well MW-03D.

Building 82

The Operating Properly and Successfully (OPS) Demonstration and RACR were finalized in January 2018. An Explanation of Significant Differences (ESD) was also finalized in January 2018, which changed the selected remedy to No Further Action (NFA). The foundation of the decision of NFA was based on the SRA Board of Directors voting in April 2017 to remove the Aquifer Protection District designation to the Hangar 1

Aquifer, which underlies a portion of the Building 82 site. In November 2017, the MassDEP removed the PDWSA designation from the Hangar 1 Aquifer. These two administrative actions resulted in groundwater underlying the Building 82 site to no longer be considered a suitable source for drinking water. In addition, drinking water is no longer an anticipated potential future use. Based on this change, the existing trichloroethene (TCE) and other contaminant groundwater concentrations no longer exceed Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) risk-based standards for unrestricted contact exposure.

The Building 82 FOST was finalized in February 2018 and the property was transferred to LStar in March 2018.

PFAS is present in groundwater at Building 82 and will be further evaluated through the Basewide PFAS SI. Building 82 is also included in the Basewide PFOS and PFOA LUCIP.

Solvent Release Area (SRA)

The Phase II Source Area and Permeable Reactive Barrier (PRB) Remedial Design (RD)/Remedial Action Work Plan (RAWP) was finalized in July 2017. The Phase II PRB RD/RAWP replaced the two previously proposed mulch PRB trenches with five injection PRBs (three overburden and two weathered bedrock). Additionally, the northwest target treatment zones (TTZ), and the Eastern and Western Weathered Bedrock Treatment and Investigation Areas, were incorporated into the Phase II PRB RD/RAWP. Investigation of groundwater flow beneath the East Mat Ditch was also included.

Phase II injections were conducted in June – August 2017, with the final volume injected in October 2017. A total of 14,000-gallons of amendment and chase water were injected in the overburden and 7,600-gallons of amendment and chase water were injected in weather bedrock. The first post-injection monitoring event was conducted in March 2018, and the data indicates the PCE concentrations are decreasing in treatment areas. An increase in de-chlorination by-products was also observed, suggesting that treatment is occurring. Elevated concentrations of PCE remain in portions of weathered bedrock that were not treated. A Phase II Addendum Work Plan was issued in June 2018, which outlined treatment of PCE in weathered bedrock at locations where injections have not yet been conducted. Additional injections outlined in the Phase II Addendum Work Plan are scheduled to occur in Fall 2018, and post-injection monitoring will continue for at least two years.

Further investigation is required to evaluate if additional treatment is necessary to address PCE in bedrock. Ten new bedrock wells are being installed in Summer 2018.

RAB Member: Is the de-chlorination by-product vinyl chloride evident yet at SRA? No, vinyl chloride has not been detected yet in groundwater. As remediation/degradation of the PCE occurs it is anticipated that vinyl chloride concentrations in groundwater will increase.

RAB Member: At Building 82, the Navy transferred the property before completing the PFAS investigation? Correct, Navy was able to successfully transfer the Building 82 property; however, Navy remains committed to completing the PFAS investigation at this site. The recently completed PFOS and PFOA LUCIP places a LUC over the area of PFAS impacts at Building 82, and restricts any activity that may interfere with Navy's on-going PFAS environmental investigation.

RAB Member: What benefit is there to the developer in receiving the Building 82 land if they can't use it? Soil has been evaluated at Building 82 and no elevated PFAS concentrations were identified. Therefore, the developer can utilize the land. However, the PFOS and PFOA LUCIP prevents use of PFAS-impacted groundwater underlying the property.

RAB Member: Do the proposed LUCs at the former STP prohibit excavation activities below two feet across the site? No, the two-foot LUC restriction only applies to the portion of the site delineated as wetland. Additionally, the developer cannot build within the wetland.

RAB Member: Digging can occur in a wetland. Correct, with proper permits construction could occur; however, the LUC notifies the landowner of the restriction prohibiting excavation. In addition, Navy verifies compliance with LUCs through annual LUC inspections.

RAB Member: For the Basewide PFOS and PFOA LUCIP, can water be used for irrigation? No, all uses of groundwater are prohibited, including irrigation. The LUCIP further requires that if construction activities result in having to manage PFAS-impacted groundwater, then a de-watering plan must be provided in advance and the de-watering plan must be approved by Navy, U.S. EPA, and MassDEP. In general, PFAS-impacted groundwater removed during construction activities must be treated, prior to being re-introduced.

The PFOS and PFOA LUCIP has been in development over several years and reflects a collaborative effort between the Navy, the U.S. EPA, the MassDEP, and the developer, to allow development at the former NAS South Weymouth to proceed.

RAB Member: Has the Navy completed any ecological studies at the former NAS South Weymouth, with respect to PFAS? No, the U.S. EPA has not established any ecological values. However, the understanding of PFAS is continually evolving and if ecological values are eventually established, Navy will consider them.

RAB Member: Are PFAS present at the former Firefighting Training Area (FFTA)? Yes, PFAS are present at the FFTA; however, the concentrations are below human-health risk values.

RAB Member: Do PFAS stay in the body for an extended period? Yes, PFAS have a long half-life in the human body. PFAS are ubiquitous in the environment and humans are exposed to PFAS beyond contaminant sources. Common PFAS sources include: Teflon, rain gear, non-stick coatings to upholstery, etc.

3. DEVELOPMENT UPDATE

Navy stated that the goal is to transfer property back to the local community so that it can be placed back into beneficial use. The developer provides input to assist with prioritizing parcels for the Navy to allocate resources to achieve property transfer. The Navy has been moving forward with that process as parcels are deemed suitable for transfer. A FOST has been prepared for the small portion of land between Buildings 81 and 82 (also known as the "Tugboat" parcel), which was a hold back from FOST 5.

Both the West Gate Landfill and FFTA are also prepared for transfer.

Transfer of the former STP is the primary focus at this time.

RAB Member: My preference is to have the Navy complete clean-up of an area before transfer. I don't like LUCs. LUCs are a recognized remedial solution under the CERCLA process. While it is recognized that LUCs do not wholly remediate impacts that may be present at the site, Navy is still responsible for addressing any remaining contamination. Compliance with LUCs are monitored through annual inspections, even after property transfer, to verify the new owners are not performing activities that compromise the conditions of the LUCs.

PFAS were discovered at the former NAS South Weymouth after much of the land had been transferred, including areas with PFAS impacts. Navy has worked closely with the developer to reach back onto those parcels that were transferred to complete further investigation work specific to PFAS. The recently finalized

Basewide PFOS and PFOA LUCIP includes a provision that requires the developer to allow Navy access to properties, as necessary, to complete on-going PFAS investigation activities.

The next RAB Meeting is tentatively scheduled for October 11, 2018.



Former Naval Air Station South Weymouth Restoration Advisory Board (RAB) Update October 2018

Installation Restoration Program (IRP) Sites

Basewide PFOS and PFOA - In February 2018, Navy finalized the Basewide perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) Land Use Control and Implementation Plan (LUCIP). The Basewide PFOS and PFOA LUCIP addresses the presence of PFOS and PFOA in groundwater throughout the former Naval Air Station (NAS) South Weymouth. The Basewide PFOS and PFOA LUCIP includes the following provisions:

- Restricts the extraction of groundwater for any use. Exceptions will be made for development or construction activities, subject to the additional requirements below.
- Restricts drilling, boring, or other construction of, or any use of a well for the purpose of extracting groundwater, without the prior written consent of the Navy. Exceptions are allowed for wells used for environmental investigations or geothermal systems that do not involve the extraction or direct contact with groundwater.
- Restricts construction or development activities if they impact any groundwater. Exceptions are allowed if the activities are performed in compliance with a dewatering plan, approved in writing by the Navy.
- Restricts activities that disrupt or interfere with infrastructure components of the Navy Investigation (e.g., monitoring wells), without the prior written approval of the Navy.

The LUC boundary primarily encompasses the central portion of the former NAS South Weymouth, with other smaller areas also incorporated (Small Landfill, Rubble Disposal Area, Wyoming Street, and the Main Gate).

A Basewide per- and polyfluoroalkyl Substances (PFAS) Site Inspection was conducted at known and suspected PFAS sites throughout the former NAS in Spring/Summer 2018. The data is currently being evaluated and a Draft report is planned for Fall 2018.

Building 81 – The Record of Decision (ROD) was signed on September 30, 2014. The ROD selected remedy includes the following components:

- In-situ (Overburden and Bedrock Source Area) Enhanced Bioremediation
- Bio-barriers
- Monitored Natural Attenuation (MNA)
- Land Use Controls (LUCs)
- Five-Year Reviews (as needed)

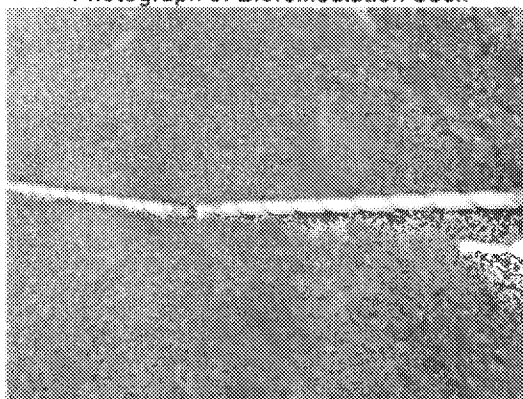
Remedial Action began in December 2015 with the installation of the overburden injection wells. Overburden injections were conducted in December 2016. Data from the 3-month, 6-month, 12-month, and 18-month post-injection sampling events indicate tetrachloroethene (PCE) concentrations have decreased to below remedial goals (RGs) in all wells, except one. Semi-annual post injection monitoring will continue until at least October 2019.

Bedrock injection and monitoring wells were installed in Summer 2017 and bedrock injections were conducted in Fall 2017. The first two post-injection monitoring events were conducted in January 2018 and April 2018, and will be followed by an additional 18-months of semi-annual monitoring to evaluate the efficacy of the injections in achieving RGs. In addition, an in-well slow-release bioremediation "sock" was installed in the well with the highest PCE concentrations (BR-7) in April 2018. The sock was removed prior to the upcoming October 2018 sampling event so that the well can be sampled to assess the sock's effectiveness.



Bedrock well installation activities

Photograph of Bioremediation Sock



Hangar 1 – In July 2018, Navy submitted the Draft Final Remedial Investigation (RI) report, which evaluates the nature and extent of PFAS at the Hangar 1 site. The Draft Final document included additional surface soil data collected in late 2017, and a revised human health risk assessment, incorporating the new surface soil data. The risk assessment was also revised to evaluate potential risk from exposure to the contaminated groundwater based on a non-potable use scenario, based on the November 1, 2017 change to the Groundwater Use and Value Determination (GUVd).

Preliminary results of the revised human health risk assessment indicates that existing PFAS groundwater contamination at the Hangar 1 site does not exceed CERCLA risk standards for unrestricted contact exposure. Based on the change to the GUVd, groundwater underlying the Hangar 1 site is no longer considered a suitable source of public drinking water; therefore, groundwater used for drinking water is no longer considered an anticipated potential future use.

Navy is currently preparing a draft Explanation of Significant Differences (ESD) that will nullify the Groundwater Restriction Boundary (GRB) established for Hangar 1 under the December 2011 ESD. The GRB was established to address the presence of PFAS and allow the property to be transferred; however, the PFAS groundwater impacts at Hangar 1 will be addressed under the Basewide PFOS and PFOA LUCIP. Therefore, the GRB established via the December 2011 ESD is redundant and no longer required.

Industrial Operations Area (IOA) – The IOA ROD was issued in September 2015. The selected remedy includes the following components.

- Pre-excavation soil sampling (to better define areas to be excavated).
- Site clearing (i.e. removal of asphalt/pavement from areas to be excavated).
- Excavation of soil with contaminants of concern exceeding RGs.
- Post-excavation confirmatory sampling (to confirm achievement of Remedial Action Objectives).
- Off-site transport and disposal of contaminated soils at a licensed facility.
- Site restoration.

The Final Pre-Design Investigation/Draft Remedial Design Work Plan (PDI/RDWP) was submitted in August 2016, followed by the Final RD/RAWP for excavation of impacted areas in September 2016. Excavation of impacted soil was conducted in Fall 2016, Winter 2017 and Summer 2018; however, additional excavation is required to achieve RGs. Several of the excavation areas are larger than anticipated and iterative excavation and post-excavation sampling is necessary.

The Navy will enter into an agreement with the Master Developer (LStar) to complete remaining excavation and restoration activities and soil disposal. Upon completion of the project, the site will be suitable for unrestricted use. The site will be secured and stockpiles will be monitored and maintained until LStar resumes excavation and disposal activities. Below is a panoramic photograph of the excavation area in September 2018.



Navy is preparing an ESD for the IOA, which will document the increase in volume, and cost, of soil excavation and offsite disposal as compared to the original specifications in the 2015 ROD, and revise the RG for chromium and select polycyclic aromatic hydrocarbons (PAHs).

The chromium preliminary remedial goal (PRG) presented in the 2015 ROD was based on the conservative assumption that all chromium present in soil was in the form of hexavalent

chromium, which is more toxic than trivalent chromium. In 2016, chromium speciation was performed to identify the site-specific ratio of hexavalent chromium to total chromium. Based on the 2016 data, a more accurate, site-specific, risk-based chromium PRG was calculated for the IOA.

For the PAHs, in January 2017, the U.S. EPA released the final Integrated Risk Information System (IRIS) assessment of the PAH benzo(a)pyrene. The IRIS assessment revised both the cancer and noncancer toxicity values for benzo(a)pyrene, which also effects the toxicity values of other potentially carcinogenic PAHs. Therefore, revised risk-based soil PRGs were calculated for the PAHs identified as contaminants of concern (COC) in the 2015 ROD.

Rubble Disposal Area (RDA) –The Navy completed installation of a landfill gas mitigation project to reduce concentrations of methane gas adjacent to the landfill footprint in Fall 2013. Underground obstructions prevented installation in some areas. The landfill gas mitigation system was monitored monthly during 2014 to evaluate the performance, and quarterly monitoring will continue as part of normal long-term monitoring (LTM). The mitigation system has been effective in reducing methane levels; however, there are still some areas near the obstructions with elevated methane levels. A Remedial Action Completion Report (RACR) was completed in 2016 to document the corrective action and next steps required. The underground obstructions will be investigated to determine what additional corrective actions are feasible.

Sewage Treatment Plant (STP) -

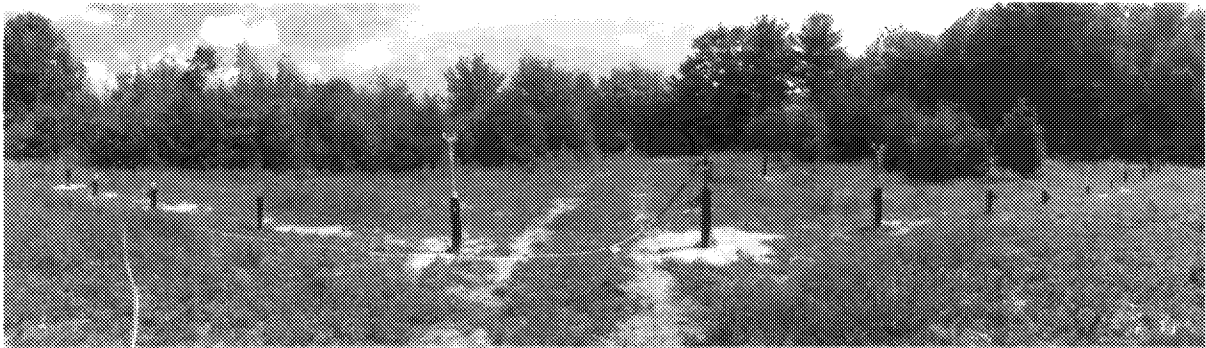
A Proposed Remedial Action Plan (PRAP) was issued in August 2018. A public hearing was held on August 16, 2018 to provide information to the public on the proposed amended remedy. No public comments were received on the PRAP. A Draft ROD was issued in September 2018, which included the following amended remedy components, as presented in the PRAP:

- Apply administrative LUCs restricting access to subsurface soil below nine feet below ground surface (bgs) in the upland area and subsurface soil below two feet bgs in the wetland by maintaining a soil cover. Current zoning allows for high-density housing within most of the STP site. The LUC will also prohibit residential land use within the LUC boundaries. The proposed boundary of the LUC is shown on Figure 4. The LUC will be designed in a LUCIP. The LUCIP will present LUC boundaries correlated to known horizontal and vertical survey datums.
- A provision of the LUC will require that the property owner develop a soil management plan, on behalf of Navy, to ensure impacted soils are managed properly and that any future construction work in these areas is completed by properly trained workers. The LUC will require that the Navy submit the soil management plan to EPA and MassDEP for approval, prior to the commencement of construction activities.
- Annual Inspection/Certifications and five-year reviews will be completed to evaluate the remedy.
- Long term monitoring and operation and maintenance (O&M) of the soil cover.

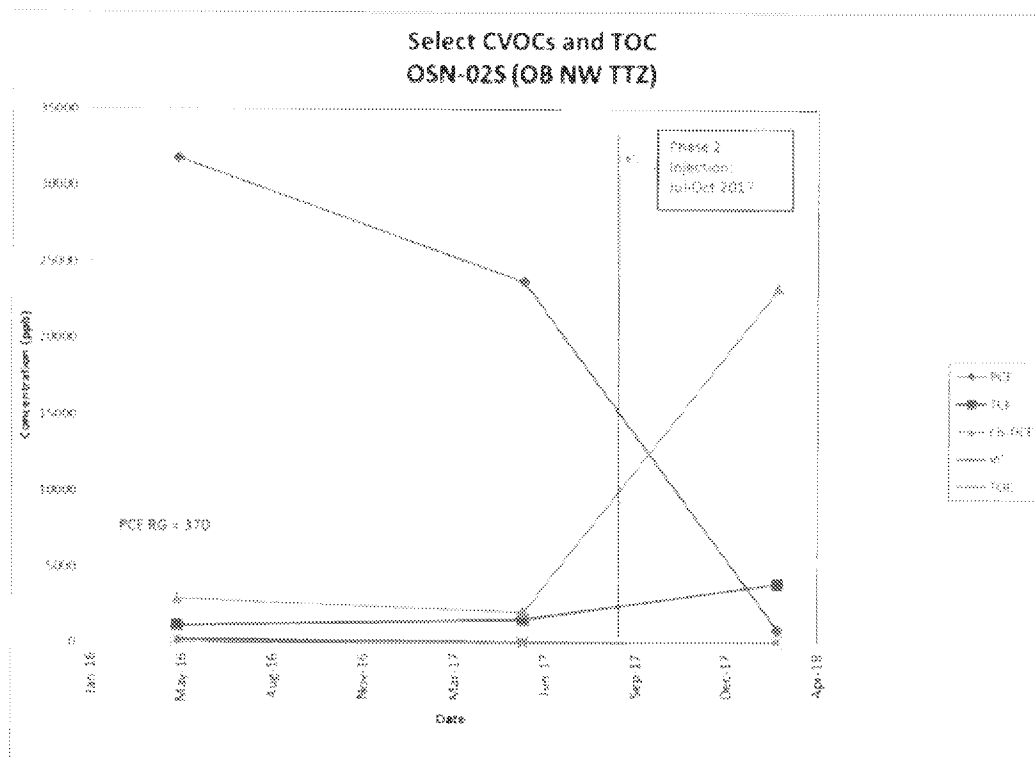
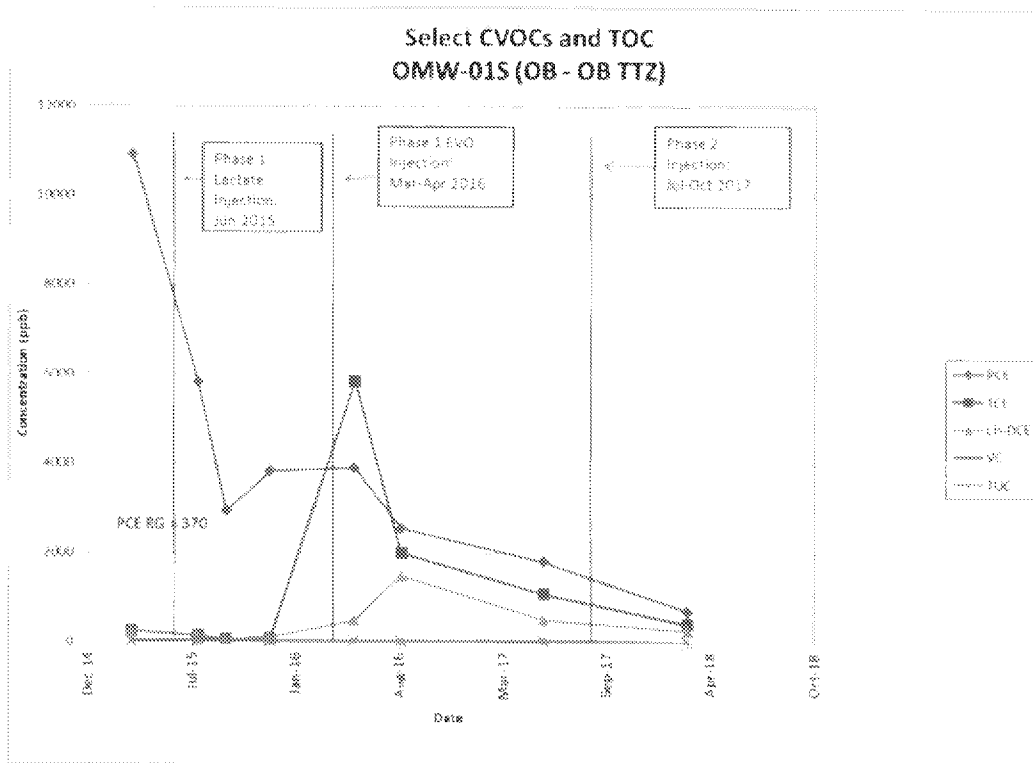
A Draft LUCIP and Notice of Activity Use Limitation (NAUL) will be submitted for regulatory review in Fall 2018. A Finding of Suitability to Transfer (FOST) is also being prepared so that the property can be transferred in 2019.

Small Landfill – Post ROD LTM is being conducted. The most recent sampling event was completed in September 2018 and the next event is scheduled for March 2019. The landfill will be mowed in November 2018.

Solvent Release Area – The first phase of Target Treatment Zone (TTZ) enhanced bioremediation injections (sodium lactate injection) were completed in June 2015 in both overburden and bedrock. Injection of a different carbon substrate (emulsified vegetable oil or EVO) to further enhance bioremediation was conducted in March/April 2016. Post-injection monitoring was conducted to evaluate the efficacy of the injections on reducing PCE concentrations in the TTZ. Results of the post-injection monitoring indicated that the bioremediation amendments were successfully distributed to the TTZs in overburden and bedrock and have established reducing conditions favorable for reductive dechlorination. Concentrations of PCE in the injection areas were measured to have decreased in the sampling events following the injection event, compared to PCE concentrations prior to injection. As expected, concentrations of dechlorination daughter products TCE and cis-1,2-dichloroethene (cis-1,2-DCE) were measured to increase in concentration in the injection area, indicating that the remedy is working.



In Spring 2017, the Phase II Remedial Design injection wells and monitoring wells were installed. A pre-injection groundwater sampling event was conducted in late May, and injections were conducted in Summer 2017. Semi-annual post-injection sampling will be conducted for three years. The first event was conducted in February 2018 and the second event was conducted in September 2018 (results pending). Initial results are promising, graphs of chlorinated volatile organic compounds (CVOCs) and total organic carbon (TOC) at two wells is provided below.



In May 2018, a Phase II Remedial Design Addendum was submitted for regulatory review. The purpose of the addendum is to:

- conduct additional weathered bedrock injections in impacted areas identified during the 2017 investigation; and,
- further investigate PCE concentrations in bedrock below the impacted weathered bedrock areas.

Field work for the Phase II Addendum began in May 2018. Monitoring wells installation will be completed in September 2018 and injections will be conducted in October/November 2018.

West Gate Landfill – Post ROD LTM is being conducted. The most recent sampling event was completed in September 2018 and the next event is scheduled for March 2019.

An Amendment to the Basewide PFAS LUCIP that includes the West Gate Landfill in the PFOS and PFOA LUC Area has been submitted for regulatory review. Once the Amendment is finalized, a NAUL and FOST will be issued for the West Gate Landfill in Winter 2019 so that the property can be transferred.

**SUMMARY STATUS
CERCLA SITES AT FORMER NAS SOUTH WEYMOUTH**

CERCLA Status	Site Inspection	RI/FS	Proposed Plan/ROD	Remedial Design/ Remedial Action	Post-ROD LTM
Basewide PFAS	X				
Building 81				X	
Hangar 1		X			
Industrial Operations Area				X	
Rubble Disposal Area					X
Sewage Treatment Plant				X	
Small Landfill					X
Solvent Release Area				X	
West Gate Landfill					X

Environmental Baseline Survey (EBS) Sites

- RIA 11 (AFFF) – The 9th round of LTM sampling at the former Fire Fighting Training Area (FFTA) was conducted in April 2018 and the 10th round is planned for October 2018. PFOS and PFOA concentrations in groundwater continue to exceed screening criteria; however, there are no screening criteria exceedances in surface water or sediment.

Impacted groundwater is located within the Basewide PFOS and PFOA LUC Area. Navy is currently preparing a draft ESD that will nullify the GRB established for the FFTA

under the August 2013 ESD. The GRB was established to address the presence of PFAS and to allow the property to be transferred; however, the PFAS groundwater impacts at the FFTA are now addressed under the Basewide PFOS and PFOA LUCIP. Therefore, the GRB established via the August 2013 ESD is redundant and no longer required.

- RIA 111 (Old Hangar 2) – A work plan for additional investigations is the next action for this site.

Massachusetts Contingency Plan (MCP) Sites

There are currently no open MCP Sites.

Finding of Suitability to Transfer (FOST)

- FOST 6B3 - Navy is in the process of preparing a FOST for the holdback parcel that is located between the Building 81 and 82 sites.
- FOST 6A2 –The Navy had taken the West Gate Landfill out of FOST 6A and re-issued FOST 6A1 that only included AOC 55C, Small Landfill, and the Main Gate Encroachment Area. The FOST 6A1 parcels were transferred in the Fall of 2015. The West Gate Landfill is now incorporated into FOST 6A2 and a draft will be available in 2018. A NAUL will be used for the West Gate Landfill deed restriction. Transfer of the West Gate Landfill is planned for 2019.
- FOST 4 & 5A Addendum –An Addendum to FOST 4 and 5A to update and address the parcels that were held back from transfer due to the previously unresolved considerations from the presence of PFAS at the FFTA has been signed by the Navy and the parcels are now suitable for transfer. The "Hold Back" parcels at the FFTA area, approximately 8.8 acres, are anticipated to be transferred to the Southfield Redevelopment Authority (SRA) shortly.

Please feel free to contact Dave Barney, BRAC Environmental Coordinator, at 781-626-0105 (or by email at david.a.barney@navy.mil), or stop by the Caretaker Site Office if you have any questions or concerns related to this memo or any restoration activities.



AGENDA

Former Naval Air Station South Weymouth, MA Restoration Advisory Board (RAB) Meeting Agenda

Date: October 11, 2018

Time: 7:00 PM

Location: Southfield Redevelopment Authority Office
223 Shea Memorial Dr., So Weymouth, MA

<i>Agenda Items</i>	<i>Item Lead</i>	<i>Projected Time</i>
1. Introduction, Review of Meeting Notes	Facilitator	7:00 – 7:15
2. Update of Former NAS Environmental Cleanup Sites	Resolution Consultants	7:15 – 7:45
3. Five-Year Review	TetraTech NUS	7:45 – 8:30
4. Updates and Action Items	Navy	8:30 – 8:45
5. Questions, Agenda Items, Next Meeting	Facilitator	8:45 – 9:00

Facilitator: John Goodrich, Massachusetts Office of Public Collaboration

Restoration Advisory Board (RAB) Members:

Abington: (Alternate: Steve Ivas)

Hingham: no current representation

Rockland: no current representation

Weymouth: James Cunningham (Community Co-Chair); Matthew Brennen (Weymouth BoH);
Steve White

Navy: Dave Barney (Navy Co-Chair)

EPA: Laurie O'Connor (Alternate: Anni Loughlin)

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